

AMENDMENTS TO THE CLAIMS

The following is a complete set of claims for this application, replacing all prior versions:

- 1 **Claim 1 (previously presented):** A method for applying a silane coating to a surface that is
2 at least partially wettable by water, said method comprising exposing said surface to a vapor-
3 phase dihalodi(C₁-C₃ alkyl)silane and water vapor, in a non-oxidizing atmosphere at a total
4 pressure of 10⁻¹² torr to 100 torr under conditions resulting in the bonding of di(C₁-C₃
5 alkyl)silyloxy groups to said surface.

- 1 **Claim 2 (original):** A method in accordance with claim 1 in which said dihalodi(C₁-C₃
2 alkyl)silane is di(C₁-C₃ alkyl)dichlorosilane.

- 1 **Claim 3 (original):** A method in accordance with claim 1 in which said dihalodi(C₁-C₃
2 alkyl)silane is dimethyldichlorosilane.

- 1 **Claim 4 (original):** A method in accordance with claim 1 in which said surface is a
2 hydrophilic surface.

- 1 **Claim 5 (original):** A method in accordance with claim 1 in which said surface is a member
2 selected from the group consisting of hydroxyl-terminated silicon, silicon nitride, glass, steel,
3 alumina, oxides of copper, and oxides of gold.

- 1 **Claim 6 (original):** A method in accordance with claim 1 in which said surface is hydroxyl-
2 terminated polysilicon.

- 1 **Claim 7 (canceled)**

- 1 **Claim 8 (canceled)**

1 **Claim 9 (previously presented):** A method in accordance with claim 1 in which said
2 dihalodi(C₁-C₃ alkyl)silane is dichlorodi(C₁-C₃ alkyl)silane and said method comprises exposing
3 said surface to a gaseous mixture consisting of said dichlorodi(C₁-C₃ alkyl)silane, water vapor
4 and an inert gas.

1 **Claim 10 (currently amended):** A method in accordance with claim 1 in which said
2 dihalodi(C₁-C₃ alkyl)silane is dichlorodi(C₁-C₃ alkyl)silane and said method comprises exposing
3 said surface to a gaseous mixture consisting of said dichlorodi(C₁-C₃ alkyl)silane
4 ~~dichlorodimethylsilane~~, water vapor and molecular nitrogen.

1 **Claim 11 (original):** A method in accordance with claim 1 in which said vapor-phase
2 dihalodi(C₁-C₃ alkyl)silane is at a partial pressure of from about 0.5 torr to about 5.0 torr.

1 **Claim 12 (original):** A method in accordance with claim 1 in which said dihalodi(C₁-C₃
2 alkyl)silane is dichlorodimethylsilane and is at a partial pressure of from about 1.0 torr to about
3 3.0 torr.

1 **Claim 13 (original):** A method in accordance with claim 1 in which said exposure is performed
2 at a total pressure of from about 0.1 torr to about 15 torr.

1 **Claim 14 (original):** A method in accordance with claim 1 in which said exposure is performed
2 at a total pressure of from about 1 torr to about 5 torr.

1 **Claim 15 (original):** A method in accordance with claim 1 in which said exposure is performed
2 at a temperature of from about 0°C to about 85°C.

1 **Claim 16 (original):** A method in accordance with claim 1 in which said exposure is performed
2 at a temperature of from about 15°C to about 50°C.

1 **Claim 17 (original):** A method in accordance with claim 1 in which said exposure is performed
2 for a continuous exposure time of from about 3 minutes to about 30 minutes.

1 **Claim 18 (original):** A method in accordance with claim 1 in which said exposure is performed
2 for a continuous exposure time of from about 10 minutes to about 20 minutes.

1 **Claim 19 (previously presented):** A method in accordance with claim 1 in which said surface
2 has exposed hydroxyl groups.

1 **Claim 20 (previously presented):** A method in accordance with claim 19 in which said
2 surface is hydroxyl-terminated silicon.

1 **Claim 21 (previously presented):** A method in accordance with claim 19 in which said
2 surface is hydroxyl-terminated polysilicon.